

VOLKOV, V.M.; KHIZHINSKIY, B.P.

Exponential tuned radio pulse amplifier. Izv. vys. ucheb. zav.;
radiotekh. 4 no. 2:165-174 Mr-Apr '61. (MIRA 14:5)

1. Rekomendovana kafedroy vychislitel'noy tekhniki Kiyevskogo
ordena Lenina politekhnicheskogo instituta.
(Amplifiers (Electronics) (Pulse techniques (Electronics)))

25521

S/108/61/016/008/003/006
D280/D304

93240

AUTHOR: Volkov, V.M., Member of Society (See Association)
TITLE: A video amplifier with a wide dynamic range of operation
PERIODICAL: Radiotekhnika, v. 16, no. 8, 1961, 33-40

TEXT: The essential shortcoming of video amplifiers is their restricted dynamic range of operations. The instantaneous gain control MAPY(MARU) in this case cannot be applied since it introduces a parasitic signal overloading the amplifier, so that the most useful form of extending their amplitude response is the use of non-linear elements. Such an element can make the response of the amplifier quadratic, cubic, logarithmic etc. the logarithmic amplitude response (ЛЛX -LAKh) characteristic which has lately found many applications. The LAKh in a video amplifier is achieved using non-linear elements, giving a range of 20 to 25 db per stage. To obtain a dynamic range of 80 to 100 db several non-linear stages in series are required. Methods known to the author of the design of such amplifiers have certain inaccuracies as

Card 1/6

25521

S/108/61/016/008/003/006
D280/D304

A video amplifier...

to the requirements of non-linear cascaded stages. In the present article the author attempts to eliminate these inaccuracies and give a description of the circuit of a video amplifier with LAKh which has certain advantages when compared with the known methods of logarithmic video amplifier design. The LAR of an n-stage amplifier is described in a general case by

$$K_1 - \text{maximum gain of one non-linear stage; } U_{\text{out}} = K_1 U_{\text{in}} \left(a \ln \frac{U_{\text{out}}}{U_{\text{in}}} + 1 \right), \quad (1)$$

$U_{\text{in}0}$ - input voltage at which LAR of the amplifier begins; $a = \frac{1}{\ln N}$ - a coefficient determining the slope of LAKh; N - the base of the logarithm at which the input voltage is taken; U_{out} and U_{in} - the output and input voltage respectively of the n-stage amplifier. Fig.1 shows the required amplitude responses of non-linear stages for the most practical case $D_1 = K_1 = 10$ for two values of coefficient $a=1$ and $a=0.434$. Thus an amplifier with an amplitude response described by Eq. (1) is described

Card 2/6

A video amplifier...

25521

S/108/61/016/008/003/006
D280/D304

by the following parameters: 1) The dynamic range of LAKh of input voltage

$$D = \frac{U_{ine}}{U_{inb}}, \text{ where } U_{ine} = K_1^n; U_{inb} = D_1^n; U_{in n} - \text{input}$$

voltage at which the LAKh of the receiver stops to operate; 2) The dynamic range of output voltage

$$D_{out} = \frac{U_{out e}}{U_{out b}} = \frac{K_1^n U_{in b} (a \ln D + 1)}{K_1^n U_{inb}} = a \ln D + 1, \text{ from which}$$

$$a = \frac{D_{out} - 1}{\ln D}; \quad 3) \text{ The coefficient of the dynamic range of input}$$

$$\text{voltage compression } C = \frac{D}{D_{out}} = \frac{D}{a \ln D + 1}. \text{ In a stage of pulse}$$

amplification LAKh can be obtained by means of a non-linear resistance in the anode cct as shown. The law of variation of the value of resistance of the non-linear resistor $R_{non \text{ lin.}}$ is determined by considering regions of input voltage I, II, and III in Fig. 1. This law is given then as

Card 3/6

+

A video amplifier...

25521

S/108/61/016/008/003/006
D280/D304

$R_{\text{non lin. I,II,III}} = R \frac{z_{\text{non lin.}}}{z}$ and its graph is also given for a non-linear stage of a quintuple using tubes 6X17 (6Zh1P) with the slope $S=5.2 \text{ ma/v}$ for $R_a = 3 \times 10^4 \text{ ohm}$, $a=1$, $D_1 = K_1 = 10$, with R as parameter. Other graphs in the article show the theoretical (solid lines) and experimental (broken lines) graphs of resistance variation of the diode D2-Zh against the input video pulse amplitude; the cct of a quadruple using 6Zh1P valves and neperian logarithm output; the resulting output voltage as a function of input voltage compared with theoretical and required shapes of curves; and the LAKh of four stage amplifiers for the following parameters: $U'_{\text{inb}} = 5 \times 10^{-6} \text{ V}$ for 6Zh1P

$U''_{\text{inb}} = 3 \times 10^{-6} \text{ V}$ for 6Zh 20 P valves; $K_1=D_1=10$; $a = 1$. The author states in conclusion that using a non-linear resistive element in the way as shown permits: a) obtaining a 35-40 db range of logarithmic amplitude response; b) having a multi-stage amplifier to work within a dynamic range of input voltage up to 80-100 db with LAKh not worse

Card 4/6

A video amplifier...

25521

S/108/61/016/008/003/006
D280/D304

than 1%; c) having an amplifier with full sensitivity after a very short time from the end of large signals within the whole range of LAKh; d) having a constant delay time of signal in a logarithmic amplifier throughout its dynamic range of operation. There are 10 figures and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English language publication reads as follows: Ref. 2: R.V. Alred and A. Reiss. J.I.E.E. (London) v. 95, part 3, Nov. 1948)

ASSOCIATION: Nauchno-technicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A.S. Popova (Scientific and Technical Society of Radio Engineering and Electrical Communications im. A.S. Popov) [Abstractor's note: Name of association taken from first page of journal].

SUBMITTED: March 4, 1960

(For Fig. 1 see next card)

Card 5/6

ACC NR: AP6014739 (N) SOURCE CODE: UR/0229/65/000/011/0024/0024

AUTHOR: Volkov, V. M.

ORG: None

TITLE: Investigation of vibrations in frames and trusses on models made of plexiglass

SOURCE: Sudostroyeniye, no. 11, 1965, 24

TOPIC TAGS: shipbuilding engineering, structural engineering, structure vibration, structural plastic, *PLEXIGLASS*

ABSTRACT: The structural design of plexiglass models imitating various actual structures is discussed for calculation of stresses caused by mechanical vibrations. The design is based on the strict imitation of joints and members and on the proper correlation of plexiglass properties with respect to those of actually used materials. Formulas for estimating appropriate scale of values for frequencies, time, moments, and forces are presented for bending, longitudinal and torsional vibrations. Experimental curves determining Young's modules and Poisson's ratio for different vibration frequencies applied to plexiglass samples

UDC: 629.12:532.001.5

L 37964-66

ACC NR: AP6014739

2

are presented. A stress-strain diagram is also given for plexiglass of standard type (GOST 9550-60). The diagrams shown in the text represent the results of tests and experiments. The use of plexiglass models is recommended for determining the dynamic strength of various structures. Orig. art. has: 2 diagrams.

SUB CODE: 11/ SUBM DATE: None/ ORIG REF: 003/ OTH REF: 000

Card

2/2 PL 3

L 34414-66

ACC NR: AT6022229

SOURCE CCDE: UR/0000/66/000/000/0007/0013

AUTHOR: Kukuish, V. D.; Oychinnikov, I. K.; Tsar, Ye. P.; Zhilkov, V. S.; Pasechnik, V. P.; Bobol', N. K.; Volkov, V. N.

ORG: none

TITLE: Device for measuring deviations in the power level

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio, 224, 1966. Sektsiya radioizmereniy. Doklady. Moscow, 1966, 7-13

TOPIC TAGS: power meter, electric measuring measurement, generator

ABSTRACT: A device for measuring the output power of uhf generators is described. The device operates on the principle of a balanced static calorimeter used for precise power measurements in the centimeter and millimeter ranges. The system incorporates a balanced static calorimeter and a measuring block. The balanced calorimeter consists of two identical coaxial loads, i.e., an hf load and a compensated load. D-c heaters are incorporated directly in the loads. The measuring block consists of three basic sections: a d-c amplifier, a measuring circuit, and stabilised power supply sources. The following data were obtained in experiments with the device which characterize its efficiency: voltage standing wave ratio of the terminal section is practically

Card 1/2

L 34853-66

ACC NR: AP6021790

transformers have three terminals (two end terminals and a center tap each). The end terminals of opposite transformer sections are connected to each other through rectifier diodes. The load and a ballast resistor are tied to transformer secondary center taps connected in pairs as indicated. This arrangement increases the efficiency of the unit with respect to the reference voltage source and assures an abrupt limiting of the output voltage when the linear range of the characteristic is exceeded (see Fig. 1). Orig. art. has: 1 figure. [BD]

SUB CODE: 09/ SUBM DATE: 12Mar65/ ATD PRESS: 5032

Card 2/2 Fi/

L 29311-66 EMT(1)

ACC NR: AP6012339

SOURCE CODE: UR/0108/66/021/004/0025/0032

AUTHOR: Volkov, V. M. (Active member); Sidorenko, V. V. (Active member) 37
13

ORG: Scientific-Technical Society of Radio Engineering and Electric Communication
im. A. S. Popov (Nauchno-tehnicheskoye obshchestvo radiotekhniki i elektrosvyazi)

TITLE: Logarithmic video amplifier using transistors with series-parallel nonlinear feedback 15

SOURCE: Radiotekhnika, v. 21, no. 4, 1966, 25-32

TOPIC TAGS: video amplifier, negative feedback, amplifier stage, amplifier design, nonlinear effect, solid state amplifier

ABSTRACT: The authors discuss means of increasing the dynamic range of transistorized amplifiers by introducing nonlinear negative feedback, and in particular the design of amplifiers of logarithmic amplitude characteristics, which are widely used in measuring apparatus and form many electronic applications. Making use of analytic relations included in a book by one of the authors (Volkov, Logarifmicheskiye usiliteli [Logarithmic Amplifiers], Gostekhizdat, UkrSSR, 1962), the authors describe a pair of stages with series-parallel nonlinear feedback (Fig. 1) wherein the collector of the second stage is connected with a linear resistor to the emitter of the first stage. This nonlinear feedback element can be a Ge or Si diode. The

Card 1/3

UDC: 621.375.421

L-29311-66

ACC NR: AF6012339

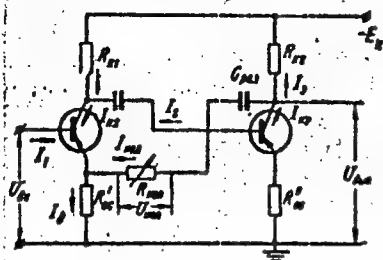


Fig. 1. Diagram of nonlinear pair.

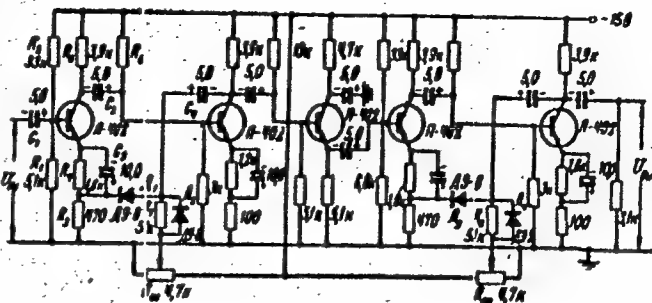


Fig. 2. Diagram of amplifier consisting of two nonlinear pairs.

required variation of the nonlinear resistance of this diode to obtain the required characteristics is determined. A stage of this type yields a gain of 30-35 db in the logarithmic characteristic range. To obtain a larger gain it is necessary to employ several stages and the nonlinear elements should be two parallel-connected diodes with different cutoff voltages, decoupled by means of emitter followers. Test results on a two-stage amplifier (Fig. 2) showed that such an amplifier can

Card 2/3

L 29311-66

ACC NR: (AP6012339

yield an overall gain of 900. The input voltage at which the logarithmic amplitude characteristic of the amplifier begins is 10^{-4} v. The dynamic range of the logarithmic amplitude characteristic is 60 db; the accuracy in the entire dynamic range is 3-4% in amplitude and 15-20% in transconductance. The agreement between the test results and the theoretical results of the paper is satisfactory. Orig. art. has: 7 figures and 11 formulas.

SUB CODE: 09/ SUBM DATE: 04Feb65/ ORIG REF: 004

Card

3/3

BK

VOLKOV, V.M.

Saturation of low-silicon cast iron with sulfur. Lit. proizv. no.8:
40 Ag '64. (MIRA 18:10)

VOLKOV, V.M.

Simplest quantum chemistry concept of a donor-acceptor bond. Zhur.
neorg. khim. 10 no.9:2193-2194 S '65. (MIRA 18:10)

L 41551-65

ACCESSION NR: AP5009073

UR/0108/65/020/003/0016/0020

AUTHOR: Vol'f, V. M. (Active member)

TITLE: High-stability regenerated circuit

SOURCE: Radiotekhnika, v. 20, no. 3, 1965, 16-20

TOPIC TAGS: oscillatory circuit, regenerated circuit

ABSTRACT: Instead of an additional coil conventionally used for regeneration purposes, a feedback element $C_k R_k$ (see Fig. 1 of the Enclosure) is suggested. The second tube functions as a cathode follower with a low output impedance. A theory for this type of regeneration is set forth, and formulas for calculating C_k and R_k are derived. In an experimental circuit operating at 31 cps, the circuit Q-factor of 6 was brought to 30 by this method. Varying the supply voltage, raising the temperature of the elements from 20 to 55C, replacing the tubes, or substituting one type of tube for another resulted in only slight variation of the Q-factor. Orig. art. has: 1 figure and 21 formulas. [03]

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi im. A. S. Popova (Scientific and Technical Society of Radio Engineering and Telecommunication.)

Card 1/1

SUBMITTED 27 MAY 63

L 17891-65 EWT(1)/EWA(h) Feb ASD(a)-5/AFETR/ESD(t)
ACCESSION NR: AP5000373 S/0108/64/019/011/0037/0041

AUTHOR: Volkov, V. M. (Active member); Andriyenko, V. F. (Active member)

TITLE: Obtaining a log-magnitude diagram in a radio-pulse amplifier by
cathodic detection

SOURCE: Radiotekhnika, v. 19, no. 11, 1964, 37-41

TOPIC TAGS: log magnitude diagram, cathodic detection, amplifier

ABSTRACT: A selective-amplifier circuit with a series combination of voltages taken from stage outputs and a cathodic detection is analyzed; the circuit has an accurate log-magnitude diagram (LMD). Each stage amplifies the r-f voltage, applies it to the next stage, and contributes to the video-pulse output voltage. The latter automatically controls the stage r-f gain when the signal increases. Tubes (6Zh1B, 6Zh1F) with a short anode-grid characteristic are recommended. To prevent self-excitation and to ensure accurate LMD, special decoupling electron-

Card 1/2

L 17891-65

ACCESSION NR: AP5000373

0
tube stages are introduced. An analytical-graphical method for calculating such amplifiers is suggested on the basis of tube characteristic approximations. Numerical examples illustrate the method. Orig. art. has: 6 figures and 6 formulas.

ASSOCIATION: Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi
(Scientific and Technical Society of Radio Engineering and Electrocommunication)

SUBMITTED: 05 Nov 62

ENCL: 00

SUB CODE: NG, EC

NO REF SOV: 004

OTHER: 001

Card 2/2

VOLKOV, V.M.

Friction welding machine. Avtom. svar. 18 no.3:73 Mr '65.
(MIRA 18:6)

VOLKOV, V.M.

Efficient gating systems for the casting of fittings. Lit.
proizv.. no.8:33-34 Ag '63. (MIRA 16:10)

VOLKOV, V.M.; KHIZHINSKIY, B.P.

Obtainment of a logarithmic amplitude characteristic in a selective amplifier using automatic gain control with consideration of pulse envelope. Izv. vys. ucheb. zav.; radio-tekh. 5 no.4:498-505 J1-Ag '62. (MIRA 16:6)

1. Rekomendovana kafedroy vychislitel'noy tekhniki Kiyevskogo ordena Lenina politekhnicheskogo instituta.
(Amplifiers(Electronics))

VOLKOV, V.M.; DYATKOVA, M.Ye.

Participation of an unshared pair of electrons in hybridization.
Zhur. neorg. khim. 8 no.8:1820-1825 Ag '63. (MIRA 16:8)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova
AN SSSR, laboratoriya stroyeniya neorganicheskikh soyedineniy.
(Molecular orbitals) (Hybrides)

VOLKOV, V.M.; DYATKINA, M.Ye.

Locating the best σ - and π -orbitals by the method of maximum overlap. Zhur.strukt.khim. 4 no.4:610-616 JI-Ag '63. (MIRA 16:9)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova.
(Valence (Theoretical chemistry)) (Molecular orbitals)

VOLKOV, Viktor Mikhaylovich, kand. tekhn. nauk; VOLLERNER, N.F.,
~~doktor tekhn. nauk~~, prof., rezensent; POLYANSKAYA, L.O., inzh.,
red. izd-va; STARODUB, T.A., tekhn. red.

[Logarithmic amplifiers] Logarifmicheskie usiliteli. Kiev, Gos-
tekhizdat, USSR, 1962. 243 p. (MIRA 16:2)
(Transistor amplifiers)

41128

S/142/62/005/004/006/010
E192/E382

4,2510

AUTHORS: Volkov, V.M. and Khizhinskiy, B.P.

TITLE: Producing a logarithmic amplitude characteristic in a selective amplifier by means of the automatic gain control based on a radio-pulse envelope

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, v. 5, no. 4, 1962, 498 - 505

TEXT: A logarithmic amplitude characteristic in an n-stage amplifier can be achieved if the stages are identical and work in succession in linear, logarithmic and quasi-linear operating conditions. Since the amplitude characteristic of a stage is $U_2 = I_{A1} R_H$, where U_2 is the output voltage, I_{A1} is the amplitude of the first harmonic of the anode current and R_H is the anode-load resistance, the required amplitude characteristic of the stage can be achieved by automatically changing the magnitude of the first current harmonic I_{A1} .

This can be done without using nonlinear semiconductor elements.

Card 1/4

S/142/62/005/004/006/010
E192/E382

Producing a

The amplifying stage performing this operation is illustrated in Fig. 2, where the resistance R_K and the capacitance C_K are chosen in such a way that the negative feedback is negligible at the radio frequency and is significant at the video or envelope frequency. The operating conditions for the stage should be chosen in such a way that, at small input voltages, the DC component of the cathode current is approximately constant and thus the gain is constant; as the amplitude of the input signal is increased, the DC component of the cathode current is increased due to the nonlinearity of the tube characteristic and this leads to an increase in the bias voltage E_c so that the operating point on the anode-grid characteristic shifts towards the lefthand side and the gain is reduced. The value of R_K can be chosen so as to produce the linear amplitude characteristic. Several methods of approximating the characteristic of the tube are considered and the approximation of the anode current by a hyperbolic tangent (method devised by N.N. Krylov - Elektricheskiye protsessy v helineynykh tsepyakh Card 2/4

S/142/62/005/004/006/010
E192/E382

Producing a

radiopriyemnikov (Electrical processes in nonlinear circuits of radio receivers), Gostekhizdat, SSSR, 1933) is used to design a logarithmic amplifying stage. An amplifier based on four such stages was designed. This operated at $f_0 = 30 \text{ Mc/s}$ and had a bandwidth $\Delta F = 1 \text{ Mc/s}$. The amplitude characteristic of the amplifier is illustrated in Fig. 9, where the horizontal axis represents the input voltage. Fig. 9 shows that the amplitude characteristic does not deviate by more than 3% from the exact logarithmic characteristic and that the dynamic range of the amplifier is 80 db. The response time of the amplifier to amplitude changes does not exceed 0.5 μs . There are 9 figures.

ASSOCIATION: Kafedra vychislitel'noy tekhniki Kiyevskogo ordena Lenina politekhnicheskogo instituta
(Department of Computer Techniques of Kiyev Order of Lenin Polytechnical Institute)

SUBMITTED: November 24, 1960

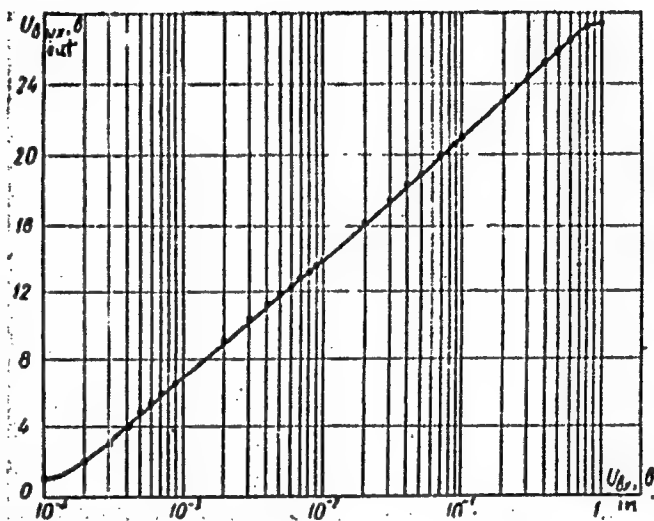
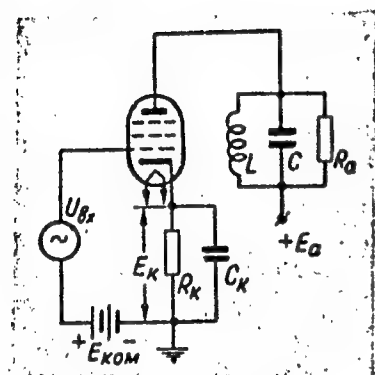
Card 3/4

Producing a

S/142/62/005/004/006/010
E192/E382

Fig. 2:

Fig. 2:



Card 4/4

Volkov, V. M.

AID P - 3761

Subject : USSR/Electricity

Card 1/2 Pub. 26 - 3/29

Authors : Volkov, V. M., T. M. Kaluzhskaya, and B. I. Klyachko, Engs.

Title : Surface corrosion of screening pipes of high-pressure steam boilers

Periodical : Elek. sta. , 10, 7-9, 0 1955

Abstract : The authors describe damages which have occurred since 1953 at a steam electric power station equipped with boilers of the TP-230 and KOIII types. The editors note that similar damages to screening pipes have occurred in several steam electric power stations. The article gives details of the damages and the conditions in which they occurred. They also give possible causes of the corrosion occurring and describe preventive measures applied. One photograph, 2 tables.

AID P - 3761

Elek. sta., 10, 7-9, 0 1955

Card 2/2 Pub. 26 - 3/29

Institution : None

Submitted : No date

ABRAMOVICH, Ya.S., inzhener; VOLKOV, V.M., inzhener; MEYER, L.A.,
inzhener.

Efficient system of awarding fuel economy prizes. Elek.sta. 27
no.3:61 Mr '56. (MLRA 9:8)
(Boilers)

VOVKOV, V. M.

ARTEM'YEV, Ye.I.; VEDENIN, N.L.; SHUMILO, I.A.; ~~VOVKOV, V.M.~~; PUL'MANOV, N.V.,
kandidat tekhnicheskikh nauk, retsenzent; LITVINOV, N.L., inzhener,
redaktor; UVAROVA, A.F., tekhnicheskiy redaktor

[D-6 diesel engine; installation, assembly and operation] Dizel'
D6; ustroystvo, montazh i ekspluatatsiya. Moskva, Gos.nauchno-
tekhn.izd-vo mashinostroit.lit-ry, 1957. 190 p. (MLRA 10:10)
(Diesel engines)

VOIKOV, V.M., inzh.; KALUZHSKAYA, T.M., inzh.; KLYACHKO, B.I., kand.tekhn.
nauk

External corrosion of waterwalls and its prevention in high-pressure
boilers. Elek.sta. 29 no.5:27-30 My '58. (MIRA 12:3)
(Boilers--Equipment and supplies)
(Corrosion and anticorrosives)

ACC NR: AP6032921

SOURCE CODE: UR/0142/66/009/003/0337/0340

AUTHOR: Volkov, V. M.; Stepanenko, V. K.

ORG: none

TITLE: Transistorized selective logarithmic amplifiers

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 3, 1966, 337-340

TOPIC TAGS: electronic amplifier, solid state amplifier, logarithmic amplifier

ABSTRACT: Two circuits of the log amplifier are suggested: a transistorized amplifier with video output; its characteristics are: tuning midfrequency, 30 Mc; passband under linear conditions, 3.2 Mc; gain, 75 db; log-magnitude-diagram error, 5%; as this amplifier does not pass information about the input-signal phase, another transistorized amplifier, with radio output, is considered; its characteristics: tuning midfrequency, 30 Mc; passband, 1.2 Mc; gain, 63 db; log-magnitude-diagram dynamic range, 56 db; error of characteristic, 5% or less. Principal circuit diagrams and experimental amplitude characteristics are shown. Orig. art. has: 4 figures.

SUB CODE: 09 / SUBM DATE: 27Apr64 / ORIG REF: 001

Card 1/1

UDC: 621.375.147.4

VOLKOV, V.M.

Studying the vibrations of rod constructions by the use of
plexiglass models. Sudostroenie no. 11:24 N '65
(MIRA 19:1)

VOLKOV, V.M.

High-silicon malleable cast iron for fittings. Lit. proizv.
no.2:47 F '65. (MIRA 18:6)

VOLKOV, V.M.; KONEVETSKIY, G.K.; LEVIN, M.F.

Analysis of the phase characteristics of a single-stage electron-tube amplifier with automatic amplification control according to the constant component of the cathode current. Radiotekhnika 20 no.3:31-35 Mr '65. (MIRA 18:6)

1. Deystvitel'nyye ohleny Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni Popova.

VOLKOV, V.M.; DYATKINA, M.Ye.

Theoretical study of the stereochemistry of complex compounds with f-electrons. Part 2: Determination of the most stable configuration of the $\text{Th}(\text{NCS})_8^{4-}$ ion by the method of maximum overlap. Zhur. strukt. khim. 5 no.4:611-619 Ag '64. (MIRA 18:3)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova
AN SSSR.

КХРАПОВ, А. Я.; ВОЛКОВ, В. М.

Casting of steel members without deadhead. Rationalizatsiia
no.9:24 '62.

VOLKOV, V.M.; VOROB'YEV, Yu.Yu.; IVANKIN, P.F.; STUCHEVSKIY, N.I.

Experience and methods of large-scale prediction in the Berezovo-
Belousovka ore deposit. Trudy Alt.GMNI AN Kazakh.SSR 12:37-48
'62. (MIRA 15:8)

(Altai Mountains--Ore deposits)

VOLKOV, Viktor Mikhaylovich, kand. tekhn. nauk; MIGULIN, I.N.,
kand. tekhn. nauk, retsenzent

[Logarithmic amplifiers using transistors] Logarifmiche-
skie usiliteli na tranzistorakh. Kiev, Tekhnika, 1965.
265 p. (MIRA 18:7)

SHUMILO, Ignat Afanas'yevich; VEGERA, Nikolay Leont'yevich; VOLKOV,--
Viktor Mikhaylovich; DUCINA, N.A., tekhn. red.

[D 6 diesel engines; design, assembly and operation] Dizeli
tipa D6; ustroistvo, montazh i ekspluatatsiia. Moskva,
Mashgiz, 1962. 291 p. (MIRA 15:9)
(Diesel engines)

FADDEYEV, B.V., kand.tekhn.nauk; VOIKOV, V.M., kand.ekon.nauk

Continuous transportation of overburden rocks in the Zyryanovsk open-pit mine. Gor. zhur. no.10:37-38 0 '61. (MIRA 15:2)

1. Ural'skiy filial AN SSSR, Sverdlovsk (for Faddeyev).
2. Institut gornogo dela im. A.A.Skochinskogo, Moskova (for Volkov).
(Zyryanovsk Region--Mine haulage)

KHRAPOV, A.Ya.; VOLKOV, V.M.

Casting of steel parts without risers. Lit.proizv. no.3:43-44
Mr '62. (MIRA 15:3)

(Founding)

VOLKOV, V.M.

Box-type drier plates for core blowing with CO₂. Lit.proizv.
no.3:39 Mr '62. (HIRA 15:3)
(Coremaking)

LOSHMAN, V.A.; VOLKOV, V.M.

Simplified method of determining germanium with phenylfluorone.
Zav.lab. 27 no.11:1341-1343 '61. (MIRA 14:10)

1. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut mednoy
promyshlennosti. (Germanium--Analysis)

S/121/61/000/009/005/006
D040/D113

AUTHOR: Volkov, V.M.

TITLE: Mechanization and automation of micrometer gages production
at the "Kalibr" Plant

PERIODICAL: Stanki i instrument, no. 9, 1961, 36-41

TEXT: The article describes new machine tools and automatic machine lines in the micrometer shop of the Kalibr zavod ("Kalibr" Plant). Mechanization and automation of the shop is not yet complete and is part of the general reconstruction of the plant. The design of micrometers had been changed for automatic production, in cooperation with the Orgstankinprom institut (Orgstankinprom Institute). The major trend is towards modernizing and automating the available universal machine tools and using standardized units. The following items in the micrometer shop are described: table 1A124 automatic machines are fitted with new loading devices and rest. 1A124) ranged for machining the ratchet casings. One vibrating hopper with two chutes feeds parts into both machines, and a special chuck moves single casings to

Card 1/4

S/121/61/000/009/005/006
D040/D113

Mechanization and automation

the tool. Seven centerless grinders converted into special-purpose grinders have vibrating hoppers, grips taking parts to the grinding wheel, automatic process control and automatic set-up systems. Standard machine tool components of the Khar'kovskiy zavod (Khar'kov Plant) are used in different combinations for drilling, countersinking and reaming in micrometer parts. Six transfer lines are working. (1) A line of two thread rolling machines for threading the micrometer screws, with a step-by-step transporting device and a mechanical "hand". The line has been designed by the Tsentral'noye konstruktorskoye byuro avtomatizatsii i mekhanizatsii Mosgorsovnarkhoza (Central Design Bureau of Automation and Mechanization of the Moscow City Sovnarkhoz) and produced at the "Kalibr" Plant. Three automatic machines will be added to it later, one of them for ultrasonic washing of ready screws and loading an assembling machine into the feeder. (2) A line finishing the ratchet casings, consisting of a washing machine, a machine finishing apertures, and a centerless grinder. The pneumatic conveyor in this line is designed by the Orgstankinprom and consists of a pipe that is connected to the shop air line through a special slide valve with electric control. (3) A line machining stop bushings, including a washing machine,

Card 2/4

S/121/61/000/009/005/006
DO40/D113

Mechanization and automation

a modernized centerless grinder, an automatic thread-cutting machine, a unit-head machine, and a pneumatic conveyer. (4) A line finishing micrometer barrels, designed by SKTRI, includes a machine trimming the butt end on the cones; a machine imprinting figures, marks, divisions and the micrometer number; a machine finishing the external surface and butt face of the front cones. The transportation system in the line is flexible, i.e. individual machines can be stopped without interrupting the operation of another. (5) A program-controlled electroplating line for chromium plating of scales. (6) A line for decorative dull chromium plating of parts. The plating lines have been designed at the "Kalibr" special designing bureau for automation and mechanization. Some of the assembly operations are automated. For instance, an arrangement heats bushings for fitting and moves two parts to be fitted into position for pressing together, checks the dependability of fit after pressing; a rotor-type machine which will assemble the four parts of the ratchet has been completed. The operation of the automatic machine lines and the assembling units is briefly described. The mechanization and automation in the micrometer shop is being

Card 3/4

S/121/61/000/009/005/006
D040/D113

Mechanization and automation.....

continued. There will be an automatic line for centerless grinding of micrometer screws and two semiautomatic machines for finish lapping; diamond boring machines; three automatic machines for painting figures and marks; machines for heat treatment of small parts; automatic ultrasonic washing machines. There are 14 figures.

Card 4/4

VOLKOV, V.M.; SAKHAROV, I.T.

Increasing the efficiency of geological studies in deep-lying
complex metal prospecting. Razved. i okh. nedr 26 no.10:41-42 0
'60. (MIRA 13:11)

1. Vostochno-Kazakhstanskoye geolupravleniye.
(Ore deposits) (Prospecting)

VOLKOV, V.M.; DYATKINA, M.Ye.

Structure of the complex ion $[\text{OsHCl}_5]^-$. Dokl. AN SSSR 134
no.2:351-353 S '60. (MIRA 13:9)

1. Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova
Akademii nauk SSSR. Predstavleno akad. I.I. Chernyayevym.
(Osmium compounds)

VOLKOV, V.M.

ABOVSKIY, V.P., inzhener; VEKSMAN, A.M., inzhener; VOLKOV, V.M., inzhener;
MATYSEK, G.V., inzhener.

Unsolved problems in designing industrial buildings for regions
with intensive snowfall. Stroi.prom.32 no.11:30-31. N '54.
(Siberia--Factories--Design and construction) (MLRA 7:11)

VOLKOV, V.M.

Let's raise the quality of reinforced-concrete articles.
Bet. 1 shel.-bet. no.5:220-222 My '61. (MIRA 14:6)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury
SSSR.
(Novosibirsk—Reinforced concrete)

CA
VOLKOV, V. H.

The coagulation of colloids by electrolytes. XV.
Electrochemical and chemical investigations of monodispersed gold soln. V. N. Volkov and A. I. Rabinovich.
Acta Physicochim. U. R. S. S. 17, 14-24(1942); cf. C. A. 34, 4902P.—Au sols were prep'd. according to Zsigmondy method and purified by prolonged dialysis in collodion bags. The mean particle radius as det'd. by the ultramicroscope was about 20 m μ . Dialysis decreased pH from 6.86 to 6.08 per one sd., from 6.94 to 6.14 in another one. This is due to the removal of basic salts from the latex. This is due to the removal of basic salts from the latex. Transmucellar liquid and to membrane hydrolysis, which transmutates the sol into a secondary colloid system.* Potentiometers showed a metric titration with K, Ba and Al chlorides showed a metric increase of acidity, more pronounced in purified sols. This was also confirmed by means of const. membranes. H ions are displaced by the cations of the added elements. H ions are displaced by the cations of the added elements. H ions are displaced by the cations of the added elements. As a result of adsorption on the Au particles. Ba and Al ions are adsorbed in amounts equiv. to those of displaced H ions. A sol contg. more than usual nonreduced gold compounds was prep'd. by using a smaller amt. of formaldehyde without electrohydrolysis. By coagulation and decomposition with an alk. soln. of H₂O₂ according to Venko decompos. with an alk. soln. of H₂O₂ according to Venko decompos. with an alk. soln. of H₂O₂ according to Venko
(*Russk. Khim. Rev.* 22, 1908(1950)) an amt. of 19 mg. per l. of Au in the form of incompletely reduced compounds was det'd. Practically the same result was found by potentiometric titration with a soln. of vanadyl sulfate, accord-

ing to the method of del Fresno and Mabriot (cf. C. A. 27, 5024). Titrations with AgNO_3 solns. led to the conclusion that the Au compds. are not removable by ultrafiltration but leave the particle surface only in the course of coagulation. These compds. are in nondialyzed soln, mostly hydroxychlorauric acid $\text{H}(\text{AuCl}_2\text{OH})$ and its salts. In dialyzed systems they consist of various hydrolysis products of the acid, finally resulting in the formation of $\text{H}(\text{Au}(\text{OH})_3)$. XVI. Electrophoresis cell and measurements on monodisperse gold sols. A. I. Rabinovich and V. N. Volkov. *Ibid.* 25-41.—Two new types of electrophoresis cells with two parallel capillaries each are designed according to the theory of Smith and Lase (cf. C. A. 30, 4361¹), one with Pt, the second with nonpolarizable electrodes for higher electrolyte concns. The cells were tested with a quartz suspension as well as with a colloidal Au soln. Complete confirmation of the above authors' theory was obtained. The particle mobility along the capillary axis is equal to the electrophoretic mobility, derived from the theory of v. Smoluchowski. A decrease of mobility and ζ -potential, observed in the process of dialysis, is ascribed to the substitution of H ions for K ions in the outer region of the double layer, leading to a less diffuse structure. Addn. of NaOH increases both quantities. This is probably caused by the reverse process, namely, the replacement of H^+ by Na^+ . Addn. of KCl to nondialyzed sols increased the two quantities. It is assumed that complex compds. of KCl with trivalent Au

ions are formed owing to electrolytic disson. of the complex salt $K(AuClO_4)$. The action of HCl is similar. Addn. of increasing amts. of KCl , $BaCl_2$, and $AlCl_3$ reduces the potential of dialysis at first rapidly and then more slowly. This pronounced change of the slope of the f -curve coincides with the end of exchange adsorption of cations and displacement of H ions. These data are used to examine Mädlar's electrostatic theory of coagulation (cf. *C. A.* 22, 2803). Satisfactory agreement of particle radii calcd. under the assumption of const. charge no. with those obtained in the ultramicroscope is found only where exchange adsorption is insignificant. The shortcomings of the above-mentioned theory are pointed out. The large discrepancy between the calcd. particle charge and the values derived from potentiometric titration data is attributed to the mol. structure of the liquid layer moving with the particle.

Robert Simha

VOLKOV, V. N.

Saws

How to speed up the replacement of the saw in the frame. Les. prom. 12, No. 9,
1952.

9. Monthly List of Russian Accessions, Library of Congress, December ¹⁹⁵² ~~1953~~, Uncl.

VOLKOV. V.N.

"Absorption of Nucleo-Active Cosmic Ray Component in the Atmosphere"
Uch. Zap. Ivanovskogo Ped. In-ta, 5, 1954, 93-102

The method of a successive generations (Rozental, I.L., DAN SSSR, 80, 731, 1951; ZhETF, 2, 440, 1953) is applied to the study of nucleo-active absorption component of the air under assumption that the spectra of primary particles is expresses by a power function $n(E) E^{-\alpha}$. It is assumed in numerical computation that one nucleon forms in each act. In this case absorption of the radioactive component characterized 10 Bev may be approximated at great depth by an exponent having an energy absorption coefficient of about 120g/cm². This value agrees with experimental data. (R. hFiz No 11, 1955)

VOLKOV, V. N.

"The Theory of Nuclear-Cascade Phenomena in Cosmic Rays." Cand Phys-Math Sci, Leningrad State Pedagogical Inst, Leningrad, 1953. Dissertation (Referativnyi Zhurnal--Fizika Moscow, Feb 54)

SO: SUM 106, 19 Aug 1954

VOLKOV, V.N.

Flood on the Sukhona River in 1955. Volog. krai no.1:125-
132 '59. (MIRA 15:2)
(Sukhona River--Floods)

Geological
VOLKOV, V.H., Cand GeO-Min Sci —(diss) "Peculiarities of structure
of the ~~survey~~ *prospecting* sections of the north-eastern part of ~~Pechora~~ *the a basin*
~~servoiz~~ and an attempt of their ~~geological~~ *logical* industrial classification."
Len, Gostoptechizdat, Leningrad ~~Department~~ *Division*, 1958. 24 pp
(Min of Higher Education USSR. Len Order of Lenin and Order of
Labor Red Banner Mining Inst in G.V. Plekhanov. Chair of ~~Prospecting~~ *Prospecting* ~~Dept~~).
125 copies (KL, 20-58, 94)

VOLKOV, V.N.

Origin of rocks of the Kurgovat granitoid massif. Dokl. AN
Tadsh. SSR 2 no.2:21-26 '59. (MIRA 13:4)

1. Upravleniye geologii i okhrany nedr pri Sovete ministrov
Tadshikskoy SSR. Predstavleno chlenom-korrespondentom AN
Tadshikskoy SSR R.B. Baratovym.
(Kurgovat Valley--Geology, Stratigraphic)

VOLKOV, V.N.

Ice crust formations in the Arctic. Trudy Gos.inst.po. proek.
mor. por. i sudorem. pred. no.6:71-78 '59. (MIRA 14:3)
(Arctic regions—Ice)

VOLKOV, V.N.

The *Stenodus leucichthys nelma* of the Kubenskoye Lake. Volog.
krai no.2:164-171 '60. (MIRA 14;11)
(Kubenskoye Lake—Salmon)

VOLKOV, V.N.; VOLKOVA, I.B.

Relationship between coal, facies of peat accumulations, and
enclosing sediments in the Orsk coal basin. Izv. AN SSSR Ser.
geol. 26 no. 12: 71-80 D '61. (MIRA 14:12)

1. Laboratoriya geologii uglya AN SSSR, Leningrad.
(Orsk Valley--Coal geology)

VASIL'YEV, N.G., kand.biolog.nauk; VOLKOV, V.N.

Rare example of Actinidia. Priroda 50 no.5:115-116 My '61.
(MIRA 14:5)

1. Dal'nevostochnyy filial Sibirskogo otdeleniya AN SSSR (for Volkov).

(Maritime Territory—Actinidia)

BUDANOV, V.I.; MESKHI, A.M.; VOLKOV, V.N.; KIRILLOV, S.P.

Epochs of granitoid magmatism in the Pamirs and the Darvaza Range.
Dokl. AN SSSR 136 no. 3:680-682 Ja '61. (MIRA 14:1)
(Pamirs—Granite) (Darvaza Range—Granite)
(Geology, Structural)

VOLKOV, V.H.; MARKOVICH, Ye.M.; FADDEYEVA, I.Z.; VOLKOVA, I.B.

Short review of the history of the study of lower Mesozoic sediments
in the southern Magnitogorsk synclinorium. Trudy Lab.geol.ugl.
no.12:9-14 '61. (MIRA 14:8)

(Ural Mountains—Coal geology)

VOLKOV, V.N.; RUDAVSKIY, I.Ye.

Standardization of hard-faces drill bits. Izv.vys.ucheb.zav.;
geol. 1 razv. 4 no.12:103-109 D '61. (MIRA 15:2)

1. Moskovskiy geolograzvedochnyy institut imeni S.Ordzhonikidze.
(Boring machinery)(Hard facing)

VOLKOV, V.N.; VOLKOVA, I.B.; LETOVA, G.K.

Lithofacies characteristics of lower Mesozoic sediments in the
southern Magnitogorsk synclinalorium. Trudy Lab.geol.ugl.
no.12:44 '61. (MIRA 14:8)

(Ural Mountains—Coal geology)

VOLKOV, V.N.; VOLKOVA, I.B.; BOGDANOVA, M.V.

Characteristics of lower Mesozoic coal-bearing sediments in
the southern Magnitogorsk synclinalorium. Trudy Lab.geol.ugl.
no.12:131-169 '61. (MIRA 14:8)
(Ural Mountains—Coal geology)

GORSKIY, I.I.; LEONENOK, N.I.; VOLKOV, V.N.; VOLKOVA, I.B.; MARKOVICH, Ye.M.

Evaluating coal potentials of the lower Mesozoic in the southern
Magnitogorsk synclinorium. Trudy Lab.geol.ugl. no.12:169-175 '61.
(MIRA 14:8)

(Ural Mountains--Coal geology)

ZHEVNOVATYY, A.I.; VOLKOV, V.N.; PEVZNER, I.Z.; Prinimali uchastiye:
KRUK, O.P.; KRUTITSKIY, V.M.; KOL'TSOV, I.M.; TSVETKOV, F.A.

Effect of elastic ultrasonic waves on reducing the speed of
scale formation. TSvet, met, 35 no.3:48-53 Mr '62.

(MIRA 15:4)

(Ultrasonic waves--Industrial applications)

L 19370-63 EWT(m)/BDS AFFTC/ASD/IJP(O)

ACCESSION NR: AR3006962

S/0058/63/000/008/V034/V035

SOURCE: RZh. Fizika, Abs. 8V234

53

AUTHOR: Volkov, V. N.

TITLE: On the calculation of the angular distribution in showers 19
produced by high energy particles

CITED SOURCE: Sb. nauchn. tr. Ivanovsk. energ. in-ta, vy*p. 10,
1962, 42-48

TOPIC TAGS: extensive air shower , angular distribution, successive
generation method

TRANSLATION: A general scheme is presented for the calculation of
the angular distribution of the nuclear-active component of air
showers by the method of successive generations. The calculation is
based on the model of the nuclear-cascade process previously proposed

Card 1/2

L 19370-63

ACCESSION NR: AR3006962

0

by Rozental'. In the calculation it is assumed that the spectrum of the secondary particles produced in the elementary act is mono-energetic. Expressions are obtained for the average cosines of the angles of the particles of the i -th generation; formulas are derived for the altitude variation of the nucleons and pions.

V. Guzhavin.

DATE ACQ: 06Sep63

SUB CODE: PH

ENCL: 00

Card 2/2

VOLKOV, V. N.; VOLKOVA, I. B.

Carbonization of Lower Mesozoic brown coals in Kazakhstan.
Sov. geol. 5 no.10:57-67 0 '62. (MIRA 15:10)

1. Laboratoriya uglya AN SSSR.

(Kazakhstan—Lignite)

VELLI, Yu.Ya., kand. tekhn. nauk; DOKUCHAYEV, V.V., kand. tekhn. nauk; FEDOROV, N.F., doktor tekhn. nauk; Prinimali uchastiye: DYUKOV, A.B., inzh.; STEPANOV, K.V., inzh.; NOVITSKIY, M.I., inzh.; AGA, M.M., kand. tekhn. nauk; SAKHAROV, I.V.; VOLKOV, V.N., inzh.; ZABORSHCHIKOV, O.V., inzh.; RYBAKOVA, V.G.; ZCLOTAR', I.A., kand. tekhn.nauk, nauchn. red.; KOSTANDOV, A.I., red.izd-va; CHERKASSKAYA, F.T., tekhn. red.

[Buildings and structures in the Far North] Zdaniia i sooruzheniia na Krainem Severe; spravochnoe posobie. Lenin-grad, Gosstroizdat, 1963. 490 p. (MIRA 17:2)

VOLKOV, V.N.; ZARUBINA, A.I.; RUDAVSKIY, I.Ye.

Economic evaluation of new hard alloy bits, based on the example
of drilling exploratory holes in the Kuznetsk Basin. Trudy
MGRI 39:161-165 '63. (MIRA 16:10)

VOLKOV, V.N.; GAVRILOVA, O.I.; TOROPETS, S.A.

Relationship between specific gravity and density in the peat -
anthracite series. Izv. AN SSSR.Ser.geol. 28 no.8:86-96 Ag '63.
(MIRA 17:2)

1. Ekspeditsiya No.5 Vsesoyuznogo nauchno-issledovatel'skogo geologicheskogo instituta, Leningrad.

VCLKOV, V.N.

Possible compaction of the bed thickness in the peat-anthracite series. Sov. geol. 7 no.5:85-97 My '64 (NIRA 1812)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut.

BABENKOVA, S.V.; VOLKOV, V.N.

"Pure" alexia, its relation to other cortical functions and its dynamics during the process of restorative learning. Zhur. nevr. i psikh. 64 no.2:166-171 '64. (MIRA 17:5)

1. Institut nevrologii (direktor - prof. N.V. Konovalov) AMN SSSR, Moskva.

BUKIN, I.V.; VOLKOV, V.H.

Determining the output of a pump in the continuous gas logging
of holes in core drilling. Razved. i otkr. nedr 30 no.7:15-19
Jl '64. (MIRA 17:12).

1. Moskovskiy geologorazvedochnyy institut imeni Sergo Ordzhonikidze (for Bukin).

VOIKOV, V.N.

Dikes of the granite porphyries of the Koltzek Massif. Zap.
Tadzh. otd. Vses. min. ob-va no.2:57-67 '64. (MIRA 18:9)

L 8987-66 ENT(d)/ENT(1)/ENP(m)/ECS(k)/ENA(1) LIP(c) MW
ACC NR: AP5027571 SOURCE CODE: UR/0170/65/009/005/0583/0588

40.55
AUTHOR: Volkov, V. N.

50
47
B

77.55
ORG: Power Institute im. V. I. Lenina, Ivanovo (Energeticheskiy institut)

TITLE: A refinement of the Karman-Polhausen integral method in the theory of the boundary layer

SOURCE: Inzhenerno-fizichesky zhurnal, v. 9, no. 5, 1965, 583-588

1, 55
TOPIC TAGS: boundary layer theory, Prandtl boundary layer, mathematic analysis

ABSTRACT: The Karman-Polhausen method is based on the integral pulse relationship

$$\frac{d}{dx} \int_0^{\delta} u(U-u) dy + \frac{dU}{dx} \int_0^{\delta} (U-u) dy = \nu \left(\frac{\partial u}{\partial y} \right)_0. \quad (1)$$

The right hand side of this equation contains the derivative of an unknown function. When another function is substituted for this unknown function, the error in the derivative may be considerable. This is the reason why, in the region of pressure increase and, in particular, in the determination of the breaking-off point of the

Cerd. 1/2

UDC:532.526

I 3987-66

ACC NR: AP5027571

3

boundary layer, the Karman-Polhausen method yields quite unreliable results. The Karman-Polhausen method can be significantly refined if the right-hand side of the equation is expressed in the form of integrals of an unknown function, u . This can be done by resorting to double integration of the initial Prandtl equations^{10, 11, 15}. It is demonstrated by mathematical development that the present method leads to satisfactory results, even in the first approximation. Orig. art. has: 28 formulas and 1 table

SUB CODE: ME/ SUBM DATE: 09Oct64/ ORIG REF: 003/ OTH REF: 002

Card 2/2

NIKOL'SKIY, Vladimir Mikhaylovich; VOLKOV, V.N., kand. geol.-
min. nauk, otv. red. Verkhnepaleozoiskaya ugle-

[Upper Paleozoic coal-bearing formation in the Yenisey
Valley of the Tunguska Basin] Verkhnepaleozoiskaya ugle-
nosnaya formatsiya prieniseiskoi chasti Tunguskogo bas-
seina. Moskva, Nauka, 1965. 93 p. (MIRA 18:4)

L 04254-67 EWT(m)/T DJ

ACC NR: AP6005378 (A)

SOURCE CODE: UR/0413/66/000/001/0122/0122

AUTHORS: Volkov, V. N.; Gurevich, A. Ya.; Makeyev, M. A.; Studenikin, S. P.; Shchekotov, V. P. 28 B

ORG: none

TITLE: A radial-piston hydraulic engine. Class 47, No. 177726 [announced by All-Union Scientific Research Institute of Building and Road Construction Machinery (Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 122

TOPIC TAGS: bushing, shaft, hydraulic device, piston engine

ABSTRACT: This Author Certificate presents a radial-piston hydraulic engine containing a stator with a profiled inner surface, a rotor (in the radial hollows of which pistons are placed), a radially positioned journal distributor of the working fluid with two systems of longitudinal channels for delivery and removal of the working fluid, and a cover attached to the stator with channels for delivery and removal of the working fluid. To increase the operating reliability of the hydraulic engine by complete removal of lateral retarding forces from the distributor, the systems of longitudinal channels of the distributor are arranged symmetrically about its axis and are coupled, correspondingly, with an annular port and a diametral channel

Cord 1/2

UDC: 621.225

L 04254-67

ACC NR: AP6005378

made in different planes in the shaft of the distributor. A bushing with two diametral channels (which coincide with the annular port and the diametral channel of the distributor) is mounted on the shaft of the distributor. The outer surface of this bushing has four bare spots perpendicular to the axis of each diametral channel. The channels of the cover for delivery and removal of the working fluid are diametrically coupled and coincide with the diametral channels of the bushing. In each channel of the cover is a fixed cup with a convex spherical end, clamped by a spring centered in this cup to a disk with a concave spherical end, which is clamped by the opposite flat end to the bare spot on the bushing.

SUB CODE: 13/ SUBM DATE: 01Jul63,

fv

Card 2/2

GIBSHMAN, Ye.Ye., redaktor; DZHUNKOVSKIY, N.N., redaktor; YEGOROV, P.A.,
inzhener, redaktor; NITROPOL'SKIY, N.M., professor, redaktor;
PUSHTORSKIY, Ye.I., inzhener; ROYER, Ye.N., inzhener;
POLIVANOV, N.I., dotsent; KUEDYUMOV, M.D., inzhener;
OSTROVIDOV, A.M., inzhener; KROPOTOV, I.I., inzhener;
VOLKOV, V.P., dotsent.

[Handbook on the planning, construction and operation of
city roads, bridges and hydraulic structures] Spravochnik
po proektirovaniu, stroitel'stvu i ekspluatatsii gorodskikh
dorog, mostov i gidrotekhnicheskikh sooruzhenii. Pod red.
E.E.Gibshman, N.N.Dzhunkovskii, P.A.Egorov. Moskva: Izd-vo
Ministerstva kommunal'nogo khoziaistva RSFSR. Vol. 1.
[Bridges] Mosty. Pod red. N.M.Nitropol'skii, 1953. 984 p.
(MLRA 7:1)

(Bridges) (Tunnels) (Retaining walls)

VOLKOV, V.P.; Prinsipal uchastiye PLISHAKOV, M.G.

Synthesis of fiber forming polyurea. Khim.volok.no.5:26-28 '64.
(MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.

GITMAN, S.M.; VOLKOV, V.P., red.; GULYAKOVA, A., tekhn.red.; VOLKOVA, Ye.,
tekhn.red.

[Bibliography of Soviet dermatology and venereology from 1932 to
1938] Bibliograficheskii ukazatel' sovetskoi dermatologii i
venerologii za 1932-1938 gg. Moskva, Gos.izd-vo med.lit-ry,
Vol. 2. 1951. 460 p. (MIRA 11:7)

(BIBLIOGRAPHY--DERMATOLOGY)

(BIBLIOGRAPHY--VENEREAL DISEASES)

VOLKOV, V.P.

Joint activity of vitamins A and C in patients with psoriasis.
Vest.derm.i ven. 34 no.9:13-17 '60. (MIRA 13:11)

1. Iz kozhno-venerologicheskogo dispansernogo otdeleniya (zav. -
dotsept V.P. Volkov) Moskovskoy gorodskoy klinicheskoy bol'nitsy
No.23 imeni Medsantrud (glavnyy vrach A.N. Lobanova).
(PSORIASIS) (ASCORBIC ACID) (VITAMINS--A)

VOLKOV, V.P.

Current problems in dispensary service for patients with chronic dermatosis. Sov.med. 23 no.1:135-138 Ja '59. (MIRA 12:2)

1. Iz kozhno-venerologicheskogo otdeleniya (zav. V.P. Volkov) Moskovskoy gorodskoy klinicheskoy bol'nitsy No.23 imeni Medsantrud ispolnyayushchiy obyazannosti glavnogo vrach A.E. Nechayeva). (SKIN DISEASES, ther. dispensary serv. in chronic dis. (Rus))

SHEVTSOV, D.S.; ZALEVSKAYA, L.A.; GLAGOLEV, G.M.; VOLKOV, V.P.; BABININ, A.U.;
SEMENENKO, P.K.; RENSKIY, N.S.

Calcining limestone in small lumps. Sakh. prom. 31 no. 4:20-24 Ap '57.
(MIRA 10:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sakharnoy promysh-
lennosti (for Shevtsov, Zalevskaya, Glagolev, and Volkov). 2. Bobro-
vitskiy sakharnyy zavod (for Babinin, Semenenko, and Renskiy).
(Limestone) (Limekilns)

Volkov V.P.
USSR/Chemical Technology - Chemical Products and Their
Application. Ceramics. Glass. Binders. Concrete.

H-7

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 2065

Author : Shevtsov D.S., Zalevskaya L.A., Glagolev G.M., Volkov V.P.,
Babinin A.U., Semenenko P.K., Renskiy N.S.

Inst : -

Title : Calcination of Fine Limestone.

Orig Pub : Sakharnaya prom-st', 1957, No 4, 20-24

Abstract : Production scale experiments have demonstrated the possibility of calcination of fine limestone (20-100 mm lumps) in the continuous operation shaft furnaces, available at the plants, without major remodeling. The output of a furnace is 0.27-0.40 ton of lime per 1 m³ of furnace capacity per 24 hours.

Card 1/1

VOLKOV, V.P.

KONDAK, M.A.; SHVITSOV, D.S.; ZALIVSKAYA, L.A.; VOLKOV, V.P.

Effective arrangement of iron economizers. Sakh. prom. 31 no.10:40-
45 0 '57. (MIRA 11:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sakharney pro-
myshlennosti.

(Boilers)

VOLKOV, Vladimir Pavlovich; SERGEYEV, A.F., red.; GALAKTIONOVA, Ye.N.,
tekhn.red.

[Tunnels for automobile roads] Tunneli na avtomobil'nykh dorogakh.
Moskva, Nauchno-tekhn.izd-vo avtotransp.lit-ry, 1957. 381 p.

(Tunnels)

(MIRA 10:12)

3(5), 5(2)

AUTHORS: ~~Volkov, Y. P.~~, Savinova, Ye. N.

SOV/7-59-6-6/17

TITLE: On the Rubidium Distribution and the K/Rb-Ratio in the Rocks of the Lovozerskiy Alkali Massif

PERIODICAL: Geokhimiya, 1959, Nr 6, pp 524 - 529 (USSR)

ABSTRACT: The rocks of the four intrusion phases were investigated by spectrum analysis. The spectrograph ISP-51 and plates of the infrachromium-840 type were used. The amounts of g/t increase from 140 in the first phase to 230 g/t Rb in the third phase as may be seen from the results (Table 2). The youngest rocks of the massif contain, however, little rubidium, the poecilitic nepheline syenites and tavites 145 g/t, the monchiquites of the fourth phase 80 g/t Rb. The average amount of the second intrusion phase was found to be 205 g/t on the basis of a discussion with A. I. Polyakov and Yu. A. Balashova on the parts by volume of the individual rocks. Calculated for the entire massif the average is 210 g/t. The K-values of the published analyses were used for the purpose of calculating the K/Rb-ratio (Refs 1,2, and 7). The values for the first, second, and third phase thus determined are 280, 200, and 170 (Table 3). For the entire massif the K/Rb-ratio amounts to 195. Potassium

Card 1/2

On the Rubidium Distribution and the K/Rb-Ratio
in the Rocks of the Lovozerskiy Alkali Massif

SOV/7-59-6-6/17

was volumetrically determined in monchiquites, according to a method of Yu. P. Trusov and O. F. Mironova, Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy-AS USSR). Papers by A. M. Demin, D. N. Khitarov, V. I. Gerasimovskiy, V. I. Lebedev, M. D. Dorfman, and N. A. Yelisseyev are mentioned. There are 3 tables and 11 references, 8 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR, Moskva (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy of the AS USSR)

SUBMITTED: April 8, 1959

Card 2/2

VOLKOV, V.P., inzh.

Dimensions and rated values of bridge loads, Avt.dor, 24 no.2: 32
P '61. (MIRA 14:3)

(Bridges--Design)